

What is claimed is:

1. A plug for being inserted into the opening of a receptacle, wherein said receptacle includes a recess in the inner wall of said opening, said plug comprises:

an insulating plug frame portion having a cylindrical shape;

an insulating header portion of a flat plate shape for being housed in said plug frame portion and exposed at its forward end to said receptacle;

a pair of lock arms supported on the both side faces of said plug frame portion; and

an insulating plug shutter for moving back and forth in the inserting/extracting directions with respect to said plug frame portion,

wherein said header portion has a forward end for being inserted into the opening of said receptacle and includes contacts juxtaposed on its two faces,

wherein each of said paired lock arms includes: a body extending toward said receptacle; a hook portion formed on the forward end side of said body and protruding from said plug frame portion for engaging in the recess of said receptacle; and an action member formed closer to the rearward end side than said hook portion, and

wherein said plug shutter includes: a cylindrical shutter frame portion for covering said header portion; a pair of lever portions formed on the both side faces of said shutter frame

portion and protruding from said plug frame portion; and a pair of projections formed on the both side faces of said shutter frame portion and disposed to confront said lock arms individually,

5 whereby when said plug shutter is moved backward of said receptacle by holding said lever portions with the fingers, the projections of said plug shutter push the action members of said lock arms inward to elastically deform said lock arms inward thereby to move the hook portions of said lock arms inward.

10 2. A plug according to Claim 1, further comprising:
 elastic members for urging said plug shutter toward said receptacle.

3. A plug according to Claim 2, wherein said hook portions are individually formed to have a generally triangular section
15 becoming thinner toward the forward ends, and

 wherein the faces on the rearward end sides of said hook portions intersect the inserting/extracting directions of said plug.

4. A plug according to any one of Claims 1 to 3, wherein
20 said shutter frame portion covers said header portion, when said plug shutter moves forward, and exposes said header portion when said plug shutter moves backward.

5. A plug according to any one of Claims 1 to 3, further comprising:

25 a printed-circuit board for being connected to the rearward end sides of said contacts.

6. A plug according to any one of Claims 1 to 3, further

comprising:

a first shell made of a metal sheet for enveloping said plug frame portion and said header portion.

7. A plug according to Claim 6, further comprising:

5 a cylindrical metal cover for covering said printed-circuit board; and

a cable shielding clamp for shielding said metal cover.

8. A receptacle having an opening into which a plug is inserted, said receptacle comprises:

10 a recess in the inner wall of said opening,

wherein said plug includes: an insulating plug frame portion having a cylindrical shape; an insulating header portion of a flat plate shape for being housed in said plug frame portion and exposed at its forward end to said receptacle; a pair of
15 lock arms supported on the both side faces of said plug frame portion; and an insulating plug shutter for moving back and forth in the inserting/extracting directions with respect to said plug frame portion,

wherein said header portion has a forward end for being
20 inserted into the opening of said receptacle and includes contacts juxtaposed on its two faces,

wherein each of said paired lock arms includes: a body extending toward said receptacle; a hook portion formed on the forward end side of said body and protruding from said plug
25 frame portion for engaging in the recess of said receptacle; and an action member formed on the rearward end side closer than said hook portion, and

wherein said plug shutter includes: a cylindrical shutter frame portion for covering said header portion; a pair of lever portions formed on the both side faces of said shutter frame portion and protruding from said plug frame portion; and a pair
5 of projections formed on the both side faces of said shutter frame portion and disposed to confront said lock arms individually,

whereby when said plug shutter is moved backward of said receptacle by holding said lever portions with the fingers,
10 the projections of said plug shutter push the action members of said lock arms inward to elastically deform said lock arms inward thereby to move the hook portions of said lock arms inward.

9. A receptacle according to Claim 8, wherein said opening is enveloped at its edges with a second shell made of a metal.